

SECRET

MONTHLY REPORT

25X1

PAR 226

3 Apr 64

SUBJECT: Analysis of Photographic Images to Evaluate System Performance

TASK/PROBLEM

1. To provide more comprehensive and useful photographic system evaluations by including data obtained from microdensitometer scanned image edges.

DISCUSSION

25X1 2. Reduction of data from the color portion of Mission 4003 collected under PAR 25, Contract was completed. Summarized data was distributed for insertion in the Mission Image Evaluation Handbook as the following sheets:

- a. Frequency plot of line spread function width,
- b. Frequency plot of computed resolving power, and
- c. Tabular summary of the average value, standard deviation and coefficient of dispersion for the spread function width and resolving power data.

These data were obtained by microdensitometer scanning in red, green, and white light. There was no blue record, since the photographs were made through a yellow filter.

3. Only 16 edges in Mission 4005 were suitable for edge tracing. The number was limited by the small amount of film available and loss of sharp edges caused by snow cover. The reduced data from 4005 indicates that the technique does qualitatively measure a reduction in performance when degrading factors such as attitude smear are present.

4. Edges from Missions 1004-1 (64 edges), 1004-2 (74 edges), and 4006 (110 edges) were traced and are undergoing data reduction.

PLANNED ACTIVITIES

5. Data reductions will continue for Missions 1004-1, 1004-2 and 4006 and summaries will be distributed when these reductions are completed.

GROUP-1
Excluded from automatic downgrading
and declassification

Declass Review by NGA.

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